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What is claimed is:

1. A process for producing inositol from plant materials comprising the steps of:

- 5           (a)    treating an aqueous slurry of plant material with a phytase enzyme to partially hydrolyze at least one of phytate, phytic acid and phytin to inositol phosphates, under conditions which do not promote full hydrolysis to inositol.
- 10           (b)    separating said slurry into a water soluble fraction and a water-insoluble fraction:
- (c)    separating said water soluble fraction into a first ionic fraction which contains anionic components comprising inositol phosphates and a first other fraction which contains the
- 15           neutral components;
- (d)    hydrolysing the inositol phosphates in said first ionic fraction; and
- (e)    separating the hydrolyzed first ionic fraction into a second ionic fraction and a second neutral fraction which contains
- 20           inositol.

2. The process of claim 1 wherein said phytase enzyme does not include acid phosphatase.

3. The process of claim 1 wherein said step of treating the aqueous slurry is carried out at a pH between about 3.0 and

25           about 7.0.

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4. The process of claim 3 wherein said phytase enzyme includes acid phosphatase.
5. The process of claim 1 wherein said step of separating the slurry into a water-soluble fraction and an insoluble fraction is carried out by centrifugation.
6. The process of claim 1 wherein said step of separating the slurry into a water-soluble fraction and an insoluble fraction is carried out by filtration.
7. The process of any of claims 1-6, in which the step of hydrolyzing the inositol phosphates in said first ionic fraction comprises treatment of said first ionic fraction with phytase.
8. The process of any of claims 1-7, in which the step of hydrolyzing the inositol phosphates in said first ionic fraction comprises treatment of said first ionic fraction with acid phosphatase.
9. The process of claim 8, wherein said hydrolysis is carried out at a pH of less than 4.
10. The process of any of claims 1-6, in which the step of hydrolyzing the inositol phosphates in said first ionic fraction comprises subjecting of said first ionic fraction in the absence of added phytase to conditions of temperature, pressure and pH which promote hydrolysis.
11. A process as claimed in any of claims 1-10, comprising the step of separating purified inositol from said second neutral fraction.